

The Commonwealth of Massachusetts
Executive Office of Health and Human Services
Department of Public Health
William A. Hinton State Laboratory Institute
305 South Street, Jamaica Plain, MA 02130

DEVAL L. PATRICK
GOVERNOR

TIMOTHY P. MURRAY
LIEUTENANT GOVERNOR

JUDYANN BIGBY, MD
SECRETARY

JOHN AUERBACH
COMMISSIONER

08/05/2011

Brenna Flynn
Assistant District Attorney, Suffolk County

Dear ADA Flynn,

Enclosed is the information you requested in regards to Commonwealth vs. [REDACTED] Included are copies of the following:

1. Curriculum Vitae for Annie Dookhan and Kate Corbett.
2. Drug Analysis Laboratory Receipt.
3. Control Cards with analytical results for samples # [REDACTED]
4. Analysis sheets with custodial chemist's hand notations and test results.
5. GC/Mass Spectral analytical data for samples # [REDACTED]

Annie Dookhan was the custodial chemist and performed the preliminary testing and net weight for this sample. Kate Corbett was the confirmatory chemist and analyzed the GC/MS data for this sample.

If you have any questions about these materials, please call me at the number below.

Sincerely,

A handwritten signature in black ink, appearing to read "A. Dookhan".
Annie Dookhan
Chemist II
Drug Analysis Lab
Jamaica Plain, MA. 02130
(617) 983-6631

Curriculum Vitae

Annie Khan (Dookhan)

Education:

University of Massachusetts, Boston, Ma, Master of Science in Chemistry.

University of Massachusetts, Boston, Ma, Bachelor of Science in Biochemistry.

Experience:

2003 – present

Chemist I, II, Massachusetts Department of Public Health, Drug Analysis Laboratory

*Completed six-week training course conducted by senior staff within the Department of Public Health, Drug Analysis Laboratory.

*Appointed Assistant Analyst by Assistant Commissioner of Public Health, 2004.

*Responsible for the identification of illicit drugs to determine violations of harmful and narcotic drug laws.

*Trained in the use of complex analytical instrumentation, microscopes and balances for the purpose of drug analysis.

*Maintenance and repairs of all analytical instruments.

*Responsible for the Quality Control of all analytical instruments, reagents and controls/standards.

*Oversee the Quality Control/Quality Assurance program for the Drug Lab.

*Writing, revising and reviewing Standard Operating Procedures (SOPs) and Protocols.

*Notary Public.

*Qualified as an expert witness in Massachusetts Courts and U.S. District Court

2001 – 2003

QC Analyst I, II, UMMS-Massachusetts Biologic Laboratory, QC Material Control

*Completed proficiency training conducted by a member of the staff within the MLB Quality Control and Quality Assurance Department.

*Method Development for creating new techniques and enhancing vaccines for the QC Dept. and FDA.

*Writing, revising and reviewing Standard Operating Procedures (SOPs).

*Trained and supervised new chemists and interns for the department.

*Routine QC testing of products for the FDA.

*Trained in the use of complex analytical instrumentation, and balances for the purpose of QC analysis for product and validation projects.

*Calibration, preventive maintenance, QC and QA of analytical instrumentation.

*Complete testing of chemicals for Vendor Validation Project for the FDA.

*Compendial testing and interpretation of the USP, ACS, FCC, AOAC, Merck Index, PDR, etc.

Additional Training:

Dept. of Justice – Forensics Professionals. (numerous trainings)

GLP/GMP training with Massachusetts Biologic Laboratory.

QC/QA training according to FDA Codes and Regulations.

GC and GC/MS trainings with Agilent Technologies and Restek.

HPLC and LC/MS/MS trainings with Waters Cooperation.

FTIR training with Spectros.

TOC training with MBL and Sievers.

Association:

American Chemical Society (ACS)

Northeastern Association of Forensics Science (NEAFS)

Curriculum Vitae

Kate A. Corbett

Education

Bachelor of Science Degree, CHEMISTRY May 2003

MERRIMACK COLLEGE

Coursework included: Organic Chemistry, Inorganic Chemistry, Quantitative Analysis, Instrumental Analysis, Physical Chemistry, Physics, Calculus

Employment

Chemist II State Laboratory Institute (March 2008-Present)

Massachusetts Department of Public Health

Drug Analysis Laboratory

- Responsible for the identification of substance and trafficking substances to determine violation of the Massachusetts drug laws
- Responsible for the identification of pharmaceuticals to determine violation of the Massachusetts drug laws
- Operate analytical instrumentation, microscopes and balances for forensic drug analysis

Chemist I State Laboratory Institute (2005-March 2008)

Massachusetts Department of Public Health

Drug Analysis Laboratory

- Responsible for the identification of substance to determine violation of the Massachusetts drug laws
- Operate analytical instrumentation for the purpose of performing forensic drug analysis
- Successfully completed an eight week training course in the analysis of drugs conducted by senior staff of the Department of Public Health, Drug Analysis Laboratory
- Appointed an assistant analyst for the Department of Public Health, Drug Analysis Laboratory in 2005.

Research Associate (September 2003 – August 2005)

SENSOR TECHNOLOGIES, INC - Shrewsbury, MA

- Prepared chemistries used in making sensor beads
- Generated and examined sensors employing fluorescence spectroscopy
- Performed protein, dye and sugar assays using UV/VIS spectrophotometry
- Carried out titrations on ricin using fluorescence correlation spectroscopy
- Statistical analysis of experimental data

Intern (March 2003 – August 2003)

MASSACHUSETTS STATE POLICE CRIME LABORATORY - Sudbury, MA

- Assisted in the gathering of case files to fulfill the National Institute of Justice's No Suspect Backlog Reduction Grant
- Observed in the Evidence, Criminalistics, DNA, Drug, Trace, Toxicology, and Bomb/Arson Units



DRUG RECEIPT

CC #
BOOK # 30
PAGE # 28
DESTRUCTION #

District/Unit AY/DCU

Name & Rank of Arresting Officer Sgt. De. Colon ID# 10948

To be completed by ECU personnel only

Name and Rank of Submitting Officer Karen J. Foy ID# PS10

Received by _____ Date _____

Date 1-1-70

ECU Control #

No. [REDACTED] Date Analyzed: 11/22/10
City: Boston D.C.U. Police Dept.
Officer: P.O. Diana Lopez
Def: [REDACTED]
Amount: Subst: SUB
No. Cont: 12 Cont: pb
Date Rec'd: 09/01/2010 No. Analyzed: 2
Gross Wt.: 8.89 Net Weight: 3.82
Tests: 8 AS
HCHAC
Prelim: Heroin Findings: Heroin

DRUG POWDER ANALYSIS FORM

SAMPLE # [REDACTED] AGENCY Boston ANALYST ADJ

No. of samples tested: _____ Evidence Wt: _____

PHYSICAL DESCRIPTION: Gross Wt (12): 5.1021

Being powdered substance
17.12 gbs Pkg. Wt: _____
double bagged Net Wt: _____

PRELIMINARY TESTS

Spot Tests

Cobalt

2 Thiocyanate (+) _____

2 Marquis + _____

2 Froehde's + _____

2 Mecke's + _____

Microcrystalline Tests

Gold

Chloride _____

TLTA () _____

OTHER TESTS

PRELIMINARY TEST RESULTS

RESULTS Heroin

DATE 11-16-10

GC/MS CONFIRMATORY TEST

RESULTS Heroin

MS OPERATOR KAC

DATE 11-22-10

Sample #: [REDACTED]

samples tested: 2

| # | Gross Weight | Packet Weight | Net Weight | # | Gross Weight | Packet Weight | Net Weight |
|----|--------------|---------------|------------|----|--------------|---------------|------------|
| 1 | 0.4387 | | 0.3368 | 26 | | | |
| 2 | 0.3780 | 1 | 0.2815 | 27 | | | |
| 3 | | | | 28 | | | |
| 4 | | | | 29 | | | |
| 5 | | | | 30 | | | |
| 6 | | | | 31 | | | |
| 7 | | | | 32 | | | |
| 8 | | | | 33 | | | |
| 9 | | | | 34 | | | |
| 10 | | | | 35 | | | |
| 11 | | | | 36 | | | |
| 12 | | | | 37 | | | |
| 13 | | | | 38 | | | |
| 14 | | | | 39 | | | |
| 15 | | | | 40 | | | |
| 16 | | | | 41 | | | |
| 17 | | | | 42 | | | |
| 18 | | | | 43 | | | |
| 19 | | | | 44 | | | |
| 20 | | | | 45 | | | |
| 21 | | | | 46 | | | |
| 22 | | | | 47 | | | |
| 23 | | | | 48 | | | |
| 24 | | | | 49 | | | |
| 25 | | | | 50 | | | |

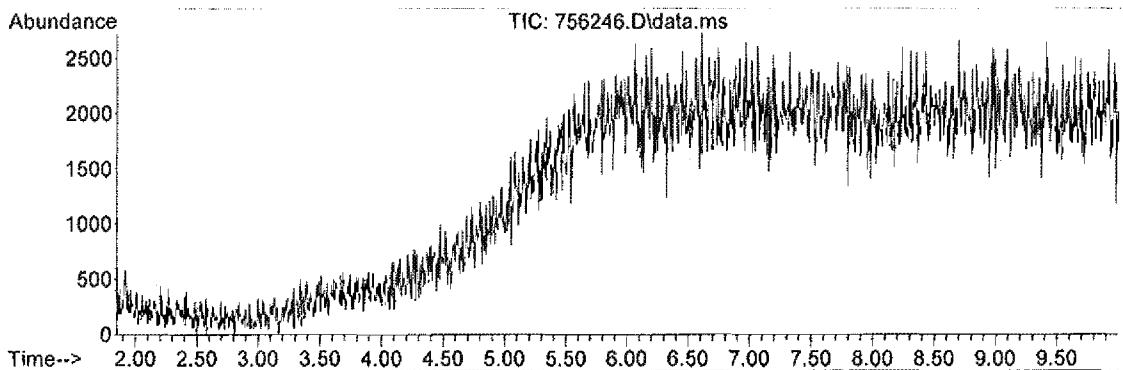
Calculations:

$$\text{Est. net wt} = 0.6383 / 2 = 0.3191 (\text{12}) \\ = 3.8292$$

Area Percent / Library Search Report

Information from Data File:

File Name : F:\Q4-2010\SYSTEM4\11_19_10\756246.D
Operator : ASD/KAC
Date Acquired : 19 Nov 2010 23:02
Sample Name : BLANK
Submitted by : ASD
Vial Number : 1
AcquisitionMeth: DRUGS
Integrator : RTE



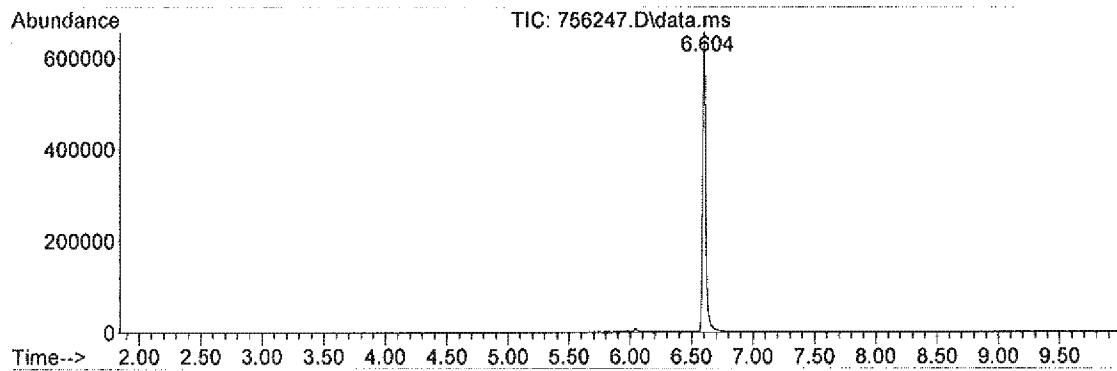
| Ret. Time | Area | Area % | Ratio % |
|-----------|------|--------|---------|
|-----------|------|--------|---------|

NO INTEGRATED PEAKS

Area Percent / Library Search Report

Information from Data File:

File Name : F:\Q4-2010\SYSTEM4\11_19_10\756247.D
Operator : ASD/KAC
Date Acquired : 19 Nov 2010 23:15
Sample Name : HEROIN STD
Submitted by : ASD
Vial Number : 47
AcquisitionMeth: DRUGS
Integrator : RTE



| Ret. Time | Area | Area % | Ratio % |
|-----------|---------|--------|---------|
| 6.604 | 1093962 | 100.00 | 100.00 |

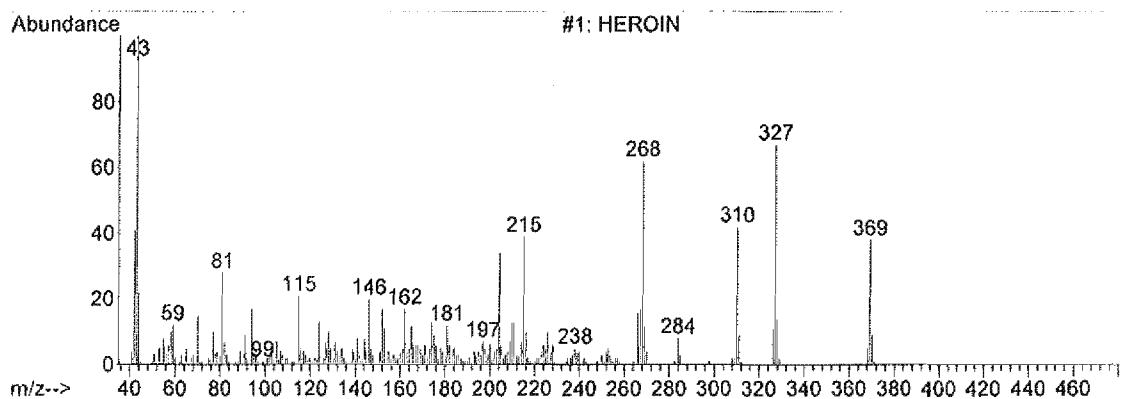
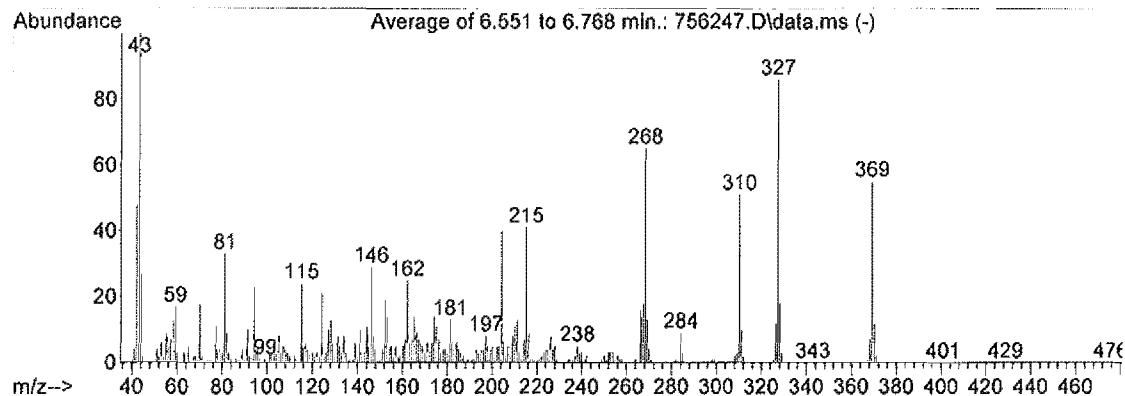
Area Percent / Library Search Report

Information from Data File:

File Name : F:\Q4-2010\SYSTEM4\11_19_10\756247.D
 Operator : ASD/KAC
 Date Acquired : 19 Nov 2010 23:15
 Sample Name : HEROIN STD
 Submitted by : ASD
 Vial Number : 47
 AcquisitionMeth: DRUGS
 Integrator : RTE

| | | |
|-------------------|------------------------|---------------------|
| Search Libraries: | C:\Database\SLI.L | Minimum Quality: 80 |
| | C:\Database\NIST05a.L | Minimum Quality: 80 |
| | C:\Database\PMW_TOX2.L | |

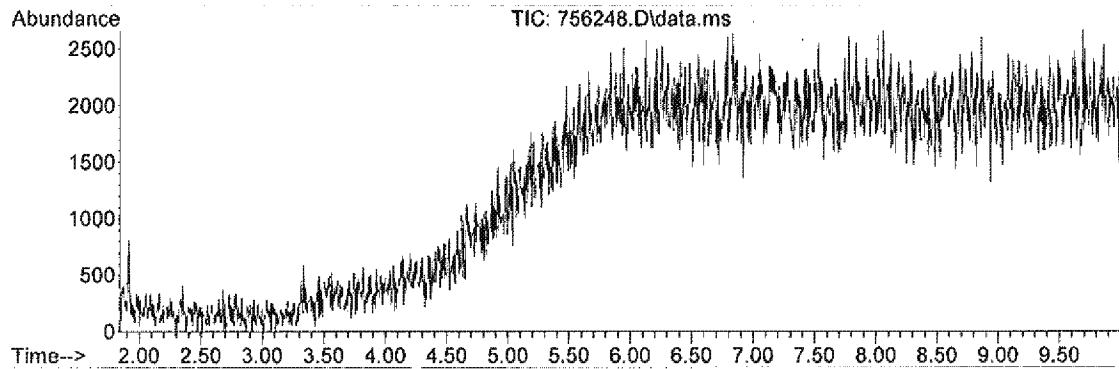
| PK# | RT | Library/ID | CAS# | Qual |
|-----|------|-----------------------------|-------------|------|
| 1 | 6.60 | C:\Database\SLI.L HEROIN | 000561-27-3 | 87 |



Area Percent / Library Search Report

Information from Data File:

File Name : F:\Q4-2010\SYSTEM4\11_19_10\756248.D
Operator : ASD/KAC
Date Acquired : 19 Nov 2010 23:29
Sample Name : BLANK
Submitted by : ASD
Vial Number : 1
AcquisitionMeth: DRUGS
Integrator : RTE



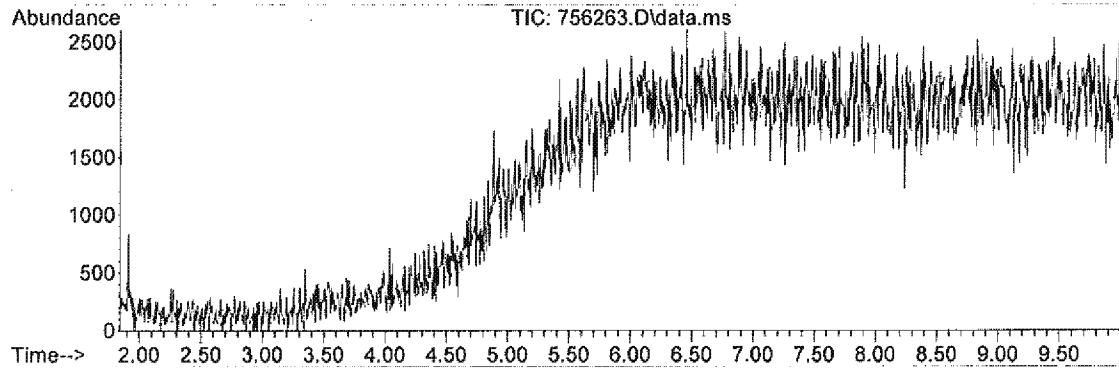
| Ret. Time | Area | Area % | Ratio % |
|-----------|------|--------|---------|
|-----------|------|--------|---------|

NO INTEGRATED PEAKS

Area Percent / Library Search Report

Information from Data File:

File Name : F:\Q4-2010\SYSTEM4\11_19_10\756263.D
Operator : ASD/KAC
Date Acquired : 20 Nov 2010 2:52
Sample Name : BLANK
Submitted by : ASD
Vial Number : 2
AcquisitionMeth: DRUGS
Integrator : RTE



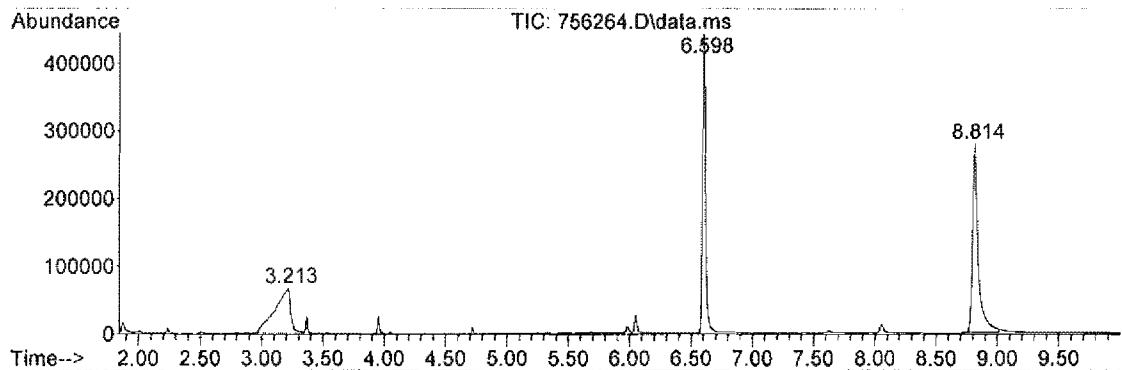
| Ret. Time | Area | Area % | Ratio % |
|-----------|------|--------|---------|
|-----------|------|--------|---------|

NO INTEGRATED PEAKS

Area Percent / Library Search Report

Information from Data File:

File Name : F:\Q4-2010\SYSTEM4\11_19_10\756264.D
Operator : ASD/KAC
Date Acquired : 20 Nov 2010 3:05
Sample Name : XXXXXXXXXX
Submitted by : ASD
Vial Number : 64
AcquisitionMeth: DRUGS
Integrator : RTE



| Ret. Time | Area | Area % | Ratio % |
|-----------|--------|--------|---------|
| 3.213 | 590193 | 26.58 | 66.38 |
| 6.598 | 741148 | 33.38 | 83.36 |
| 8.814 | 889117 | 40.04 | 100.00 |

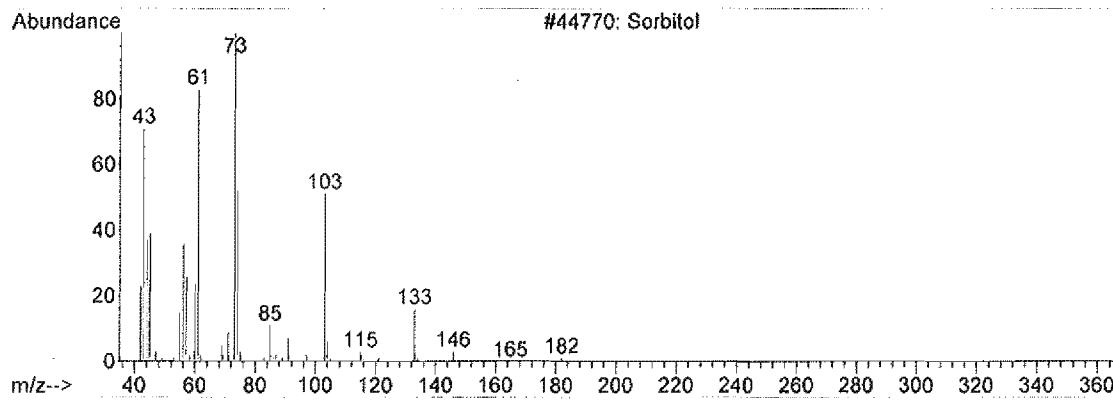
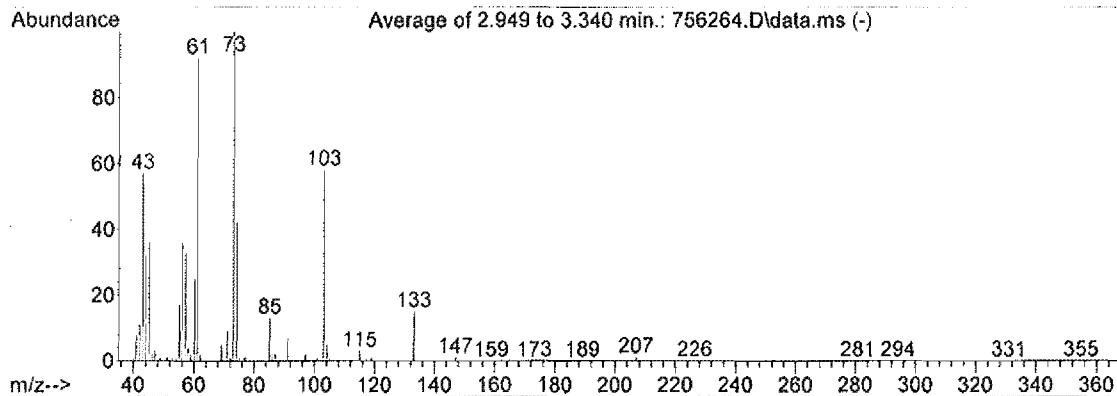
Area Percent / Library Search Report

Information from Data File:

File Name : F:\Q4-2010\SYSTEM4\11_19_10\756264.D
Operator : ASD/KAC
Date Acquired : 20 Nov 2010 3:05
Sample Name : XXXXXXXXXX
Submitted by : ASD
Vial Number : 64
AcquisitionMeth: DRUGS
Integrator : RTE

Search Libraries: C:\Database\SLI.L Minimum Quality: 80
C:\Database\NIST05a.L Minimum Quality: 80
C:\Database\PMW_TOX2.L

| PK# | RT | Library/ID | CAS# | Qual |
|-----|------|-----------------------|-------------|------|
| 1 | 3.21 | C:\Database\NIST05a.L | | |
| | | Sorbitol | 000050-70-4 | 91 |
| | | Glucitol | 026566-34-7 | 90 |
| | | Sorbitol | 000050-70-4 | 87 |



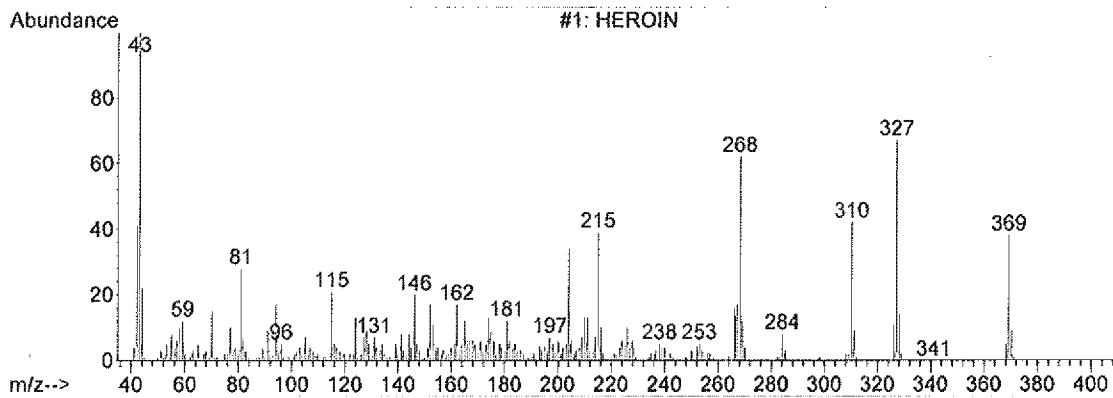
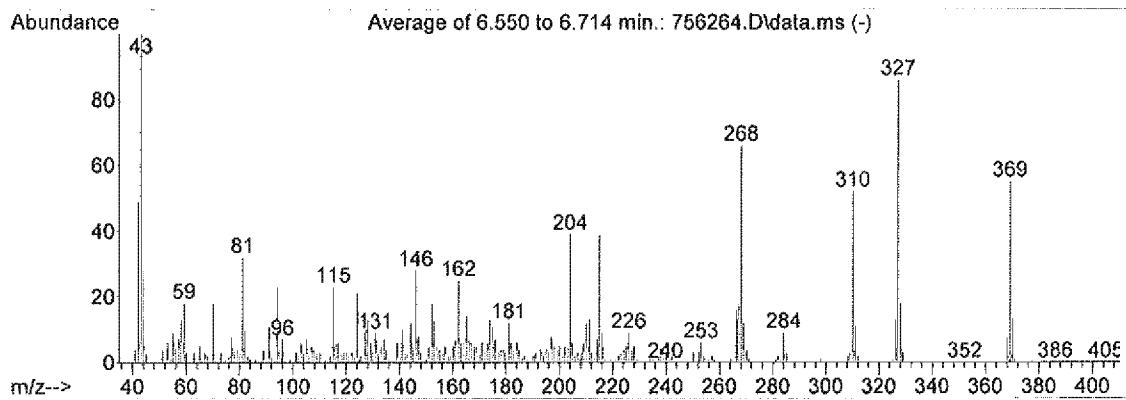
Area Percent / Library Search Report

Information from Data File:

File Name : F:\Q4-2010\SYSTEM4\11_19_10\756264.D
Operator : ASD/KAC
Date Acquired : 20 Nov 2010 3:05
Sample Name : XXXXXXXXXX
Submitted by : ASD
Vial Number : 64
AcquisitionMeth: DRUGS
Integrator : RTE

Search Libraries: C:\Database\SLI.L Minimum Quality: 80
C:\Database\NIST05a.L Minimum Quality: 80
C:\Database\PMW_TOX2.L

| PK# | RT | Library/ID | CAS# | Qual |
|-----|------|-----------------------------|-------------|------|
| 2 | 6.60 | C:\Database\SLI.L HEROIN | 000561-27-3 | 99 |



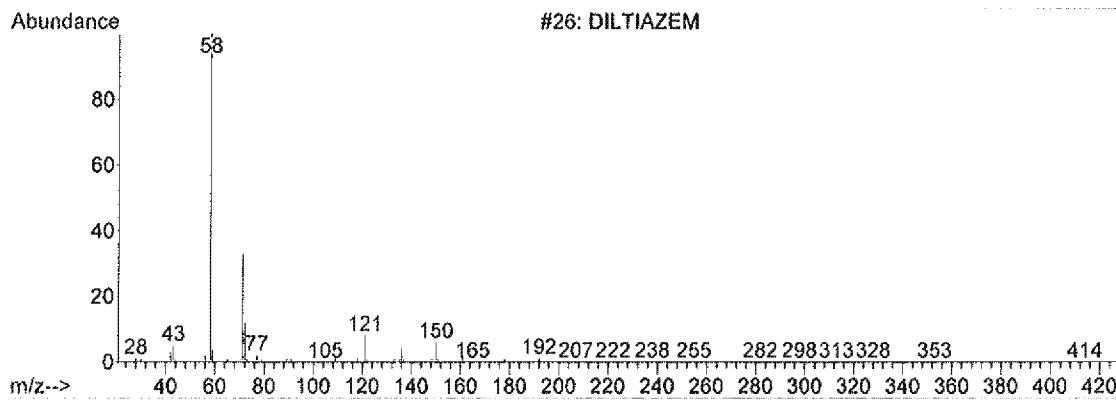
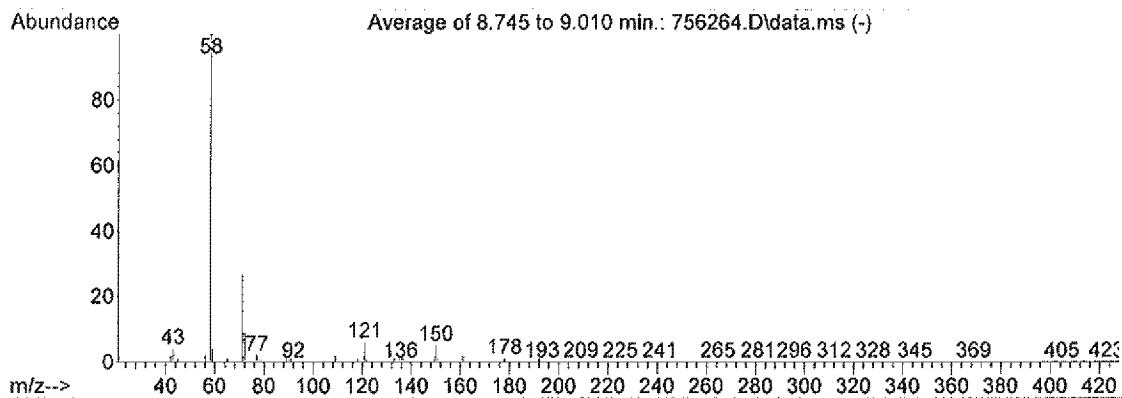
Area Percent / Library Search Report

Information from Data File:

File Name : F:\Q4-2010\SYSTEM4\11_19_10\756264.D
Operator : ASD/KAC
Date Acquired : 20 Nov 2010 3:05
Sample Name : XXXXXXXXXX
Submitted by : ASD
Vial Number : 64
AcquisitionMeth: DRUGS
Integrator : RTE

Search Libraries: C:\Database\SLI.L Minimum Quality: 80
C:\Database\NIST05a.L Minimum Quality: 80
C:\Database\PMW_TOX2.L

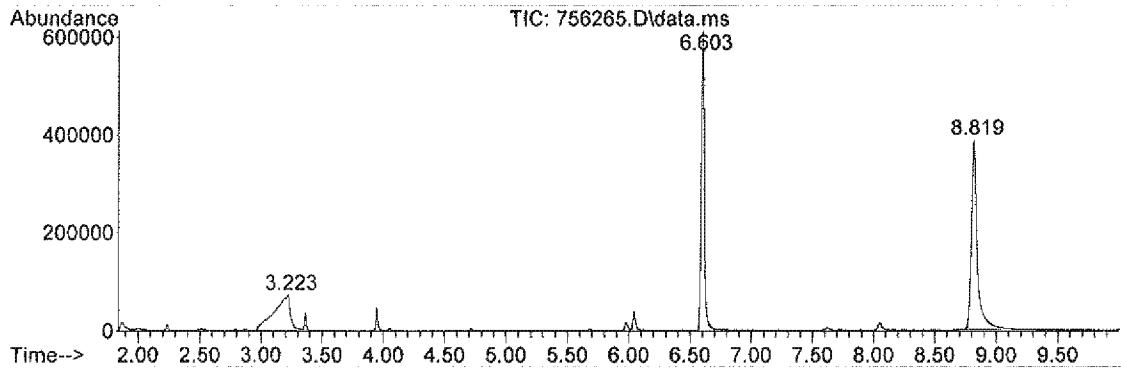
| PK# | RT | Library/ID | CAS# | Qual |
|-----|------|-------------------|-------------|------|
| 3 | 8.81 | C:\Database\SLI.L | | |
| | | DILTIAZEM | 033286-22-5 | 91 |
| | | CITALOPRAM | 059729-33-8 | 2 |
| | | CITALOPRAM | 059729-33-8 | 2 |



Area Percent / Library Search Report

Information from Data File:

File Name : F:\Q4-2010\SYSTEM4\11_19_10\756265.D
Operator : ASD/KAC
Date Acquired : 20 Nov 2010 3:19
Sample Name : B10-10145-2
Submitted by : ASD
Vial Number : 65
AcquisitionMeth: DRUGS
Integrator : RTE



| Ret. Time | Area | Area % | Ratio % |
|-----------|---------|--------|---------|
| 3.223 | 649549 | 22.40 | 52.08 |
| 6.603 | 1002631 | 34.58 | 80.39 |
| 8.819 | 1247135 | 43.01 | 100.00 |

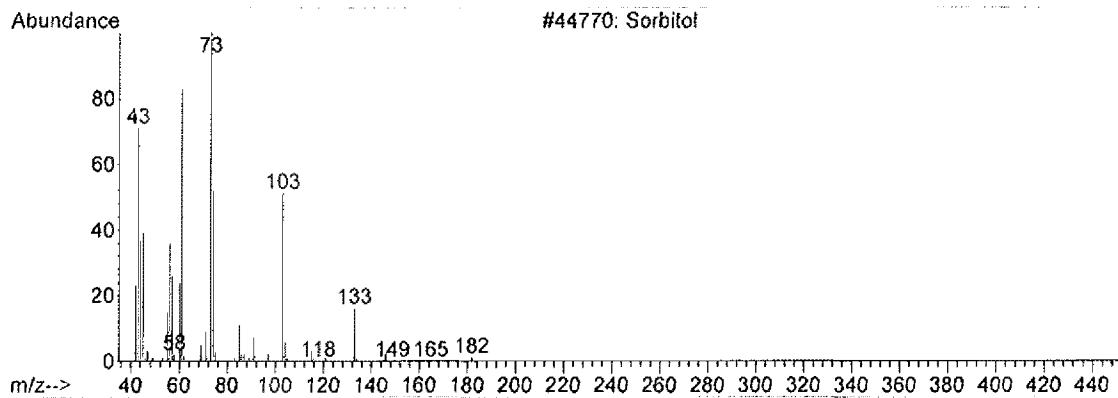
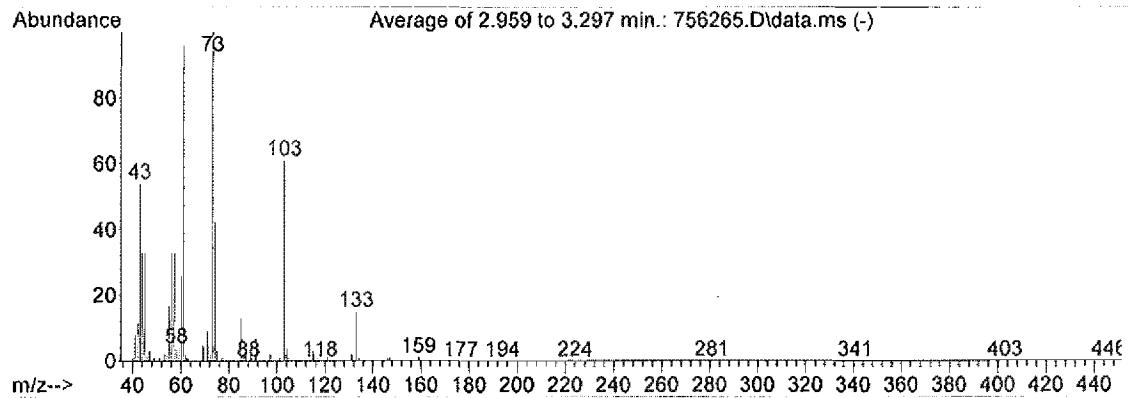
Area Percent / Library Search Report

Information from Data File:

File Name : F:\Q4-2010\SYSTEM4\11_19_10\756265.D
Operator : ASD/KAC
Date Acquired : 20 Nov 2010 3:19
Sample Name : B10-10145-2
Submitted by : ASD
Vial Number : 65
AcquisitionMeth: DRUGS
Integrator : RTE

Search Libraries: C:\Database\SLI.L Minimum Quality: 80
C:\Database\NIST05a.L Minimum Quality: 80
C:\Database\PMW_TOX2.L

| PK# | RT | Library/ID | CAS# | Qual |
|-----|------|-----------------------|-------------|------|
| 1 | 3.22 | C:\Database\NIST05a.L | | |
| | | Sorbitol | 000050-70-4 | 91 |
| | | Glucitol | 026566-34-7 | 91 |
| | | Sorbitol | 000050-70-4 | 91 |



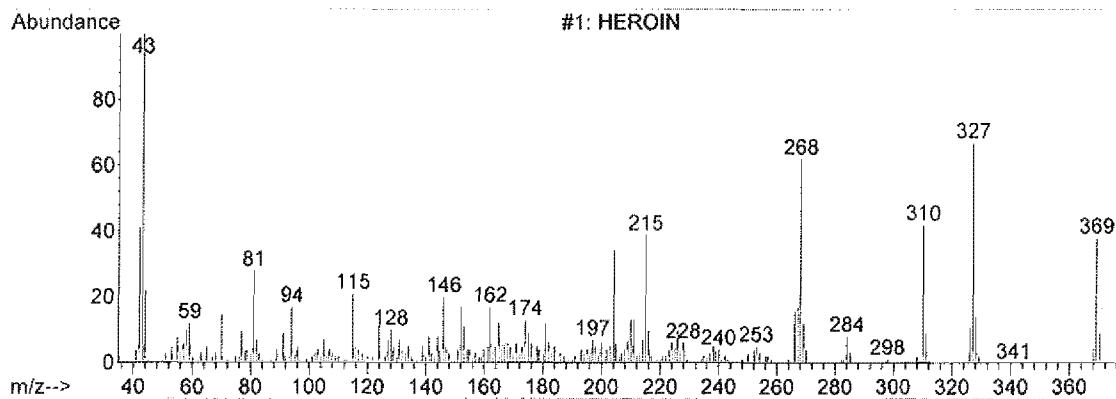
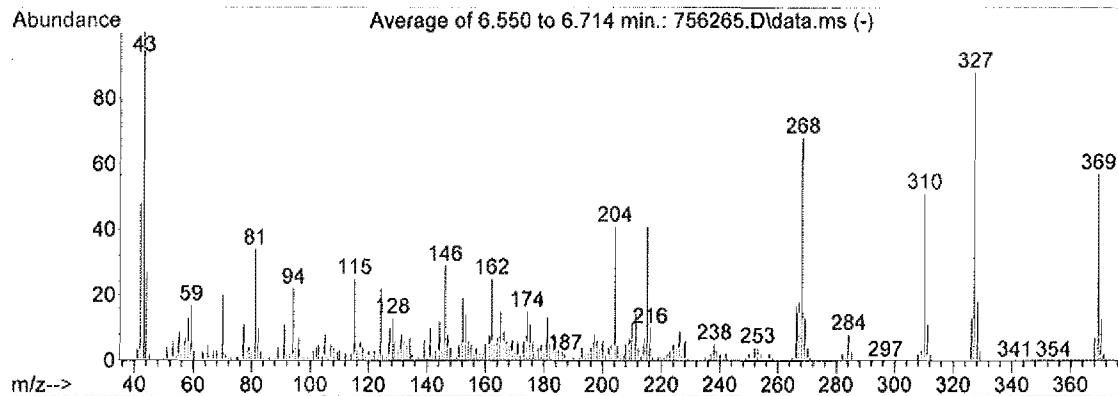
Area Percent / Library Search Report

Information from Data File:

File Name : F:\Q4-2010\SYSTEM4\11_19_10\756265.D
Operator : ASD/KAC
Date Acquired : 20 Nov 2010 3:19
Sample Name : B10-10145-2
Submitted by : ASD
Vial Number : 65
AcquisitionMeth: DRUGS
Integrator : RTE

Search Libraries: C:\Database\SLI.L Minimum Quality: 80
C:\Database\NIST05a.L Minimum Quality: 80
C:\Database\PMW_TOX2.L

| PK# | RT | Library/ID | CAS# | Qual |
|-----|------|-----------------------------|-------------|------|
| 2 | 6.60 | C:\Database\SLI.L HEROIN | 000561-27-3 | 99 |

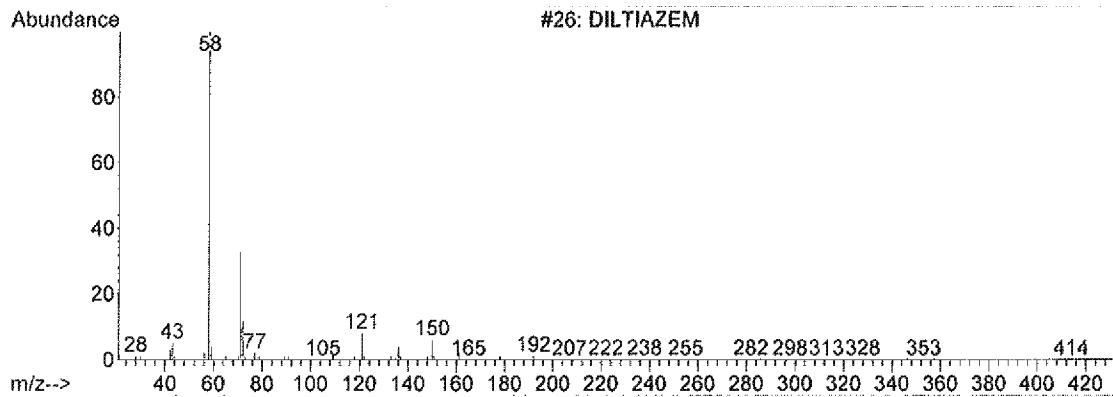
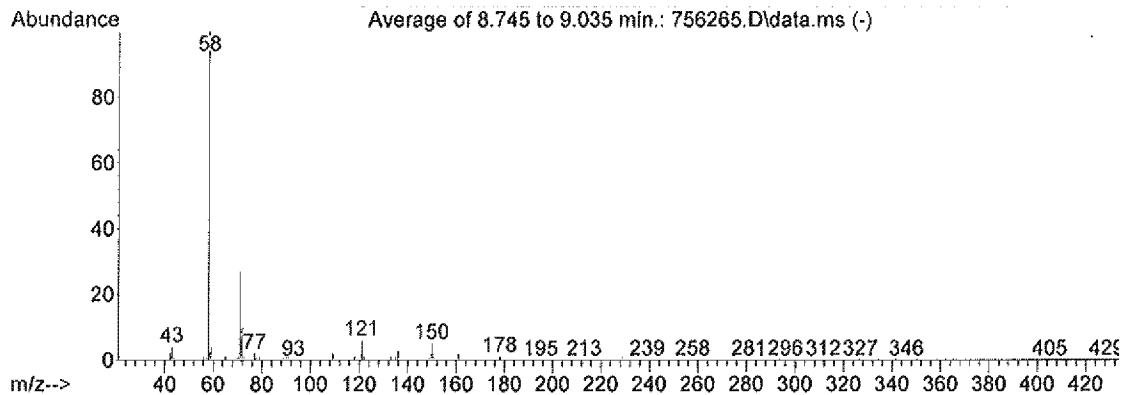


Information from Data File:

File Name : F:\Q4-2010\SYSTEM4\11_19_10\756265.D
 Operator : ASD/KAC
 Date Acquired : 20 Nov 2010 3:19
 Sample Name : B10-10145-2
 Submitted by : ASD
 Vial Number : 65
 AcquisitionMeth: DRUGS
 Integrator : RTE

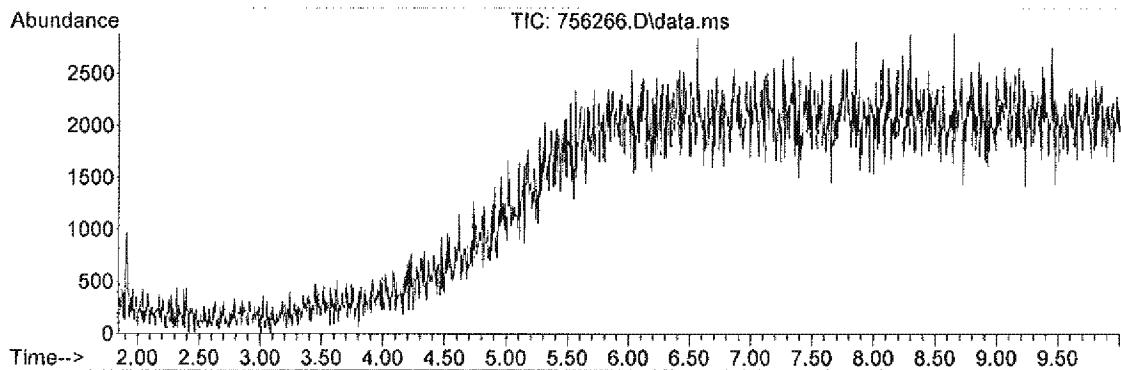
Search Libraries: C:\Database\SLI.L Minimum Quality: 80
 C:\Database\NIST05a.L Minimum Quality: 80
 C:\Database\PMW_TOX2.L

| PK# | RT | Library/ID | CAS# | Qual |
|-----|------|-------------------|-------------|------|
| 3 | 8.82 | C:\Database\SLI.L | | |
| | | DILTIAZEM | 033286-22-5 | 91 |
| | | CITALOPRAM | 059729-33-8 | 2 |
| | | CITALOPRAM | 059729-33-8 | 2 |



Information from Data File:

File Name : F:\Q4-2010\SYSTEM4\11_19_10\756266.D
Operator : ASD/KAC
Date Acquired : 20 Nov 2010 3:33
Sample Name : BLANK
Submitted by : ASD
Vial Number : 2
AcquisitionMeth: DRUGS
Integrator : RTE

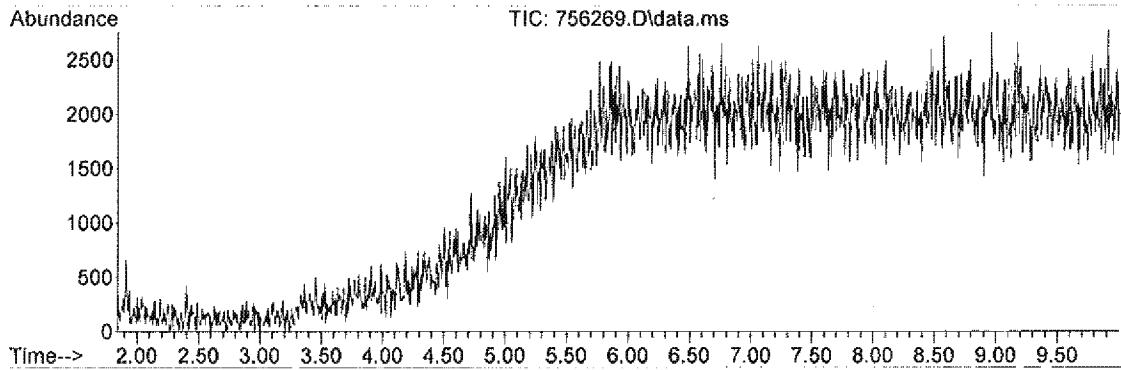


| Ret. Time | Area | Area % | Ratio % |
|-----------|------|--------|---------|
|-----------|------|--------|---------|

NO INTEGRATED PEAKS

Information from Data File:

File Name : F:\Q4-2010\SYSTEM4\11_19_10\756269.D
Operator : ASD/KAC
Date Acquired : 20 Nov 2010 4:14
Sample Name : BLANK
Submitted by : ASD
Vial Number : 2
AcquisitionMeth: DRUGS
Integrator : RTE



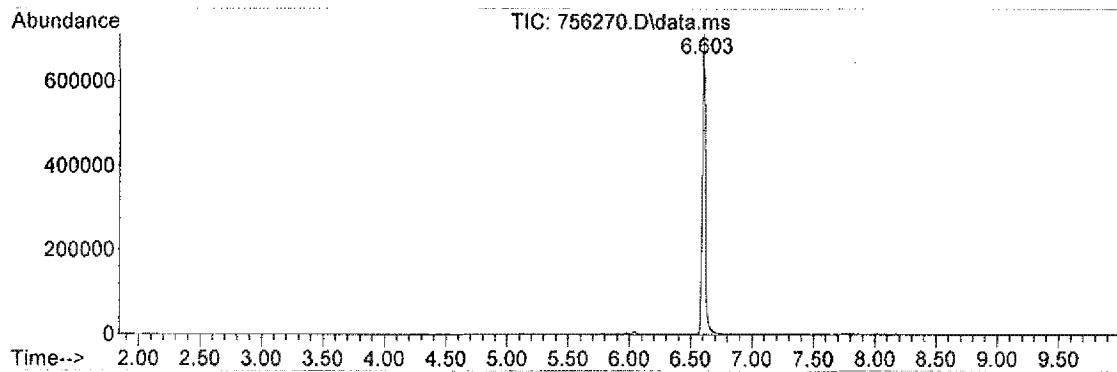
| Ret. Time | Area | Area % | Ratio % |
|-----------|------|--------|---------|
|-----------|------|--------|---------|

NO INTEGRATED PEAKS

Area Percent / Library Search Report

Information from Data File:

File Name : F:\Q4-2010\SYSTEM4\11_19_10\756270.D
Operator : ASD/KAC
Date Acquired : 20 Nov 2010 4:27
Sample Name : HEROIN STD
Submitted by : ASD
Vial Number : 70
AcquisitionMeth: DRUGS
Integrator : RTE



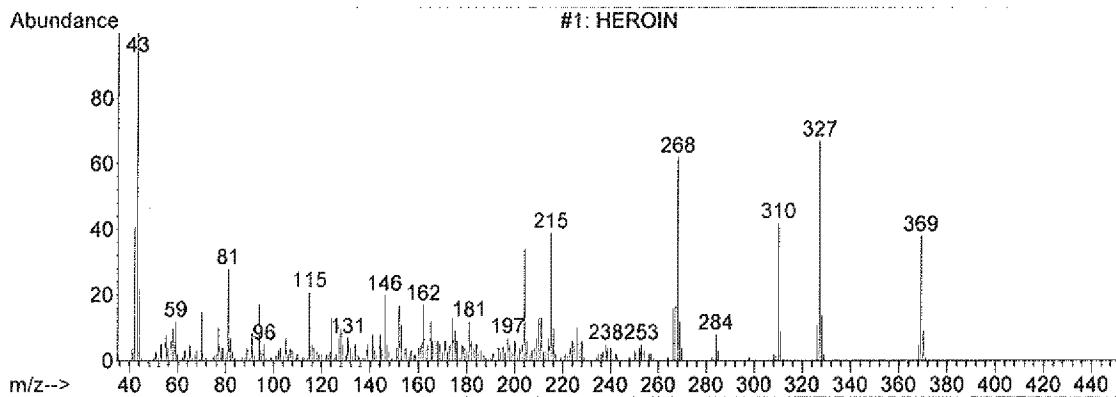
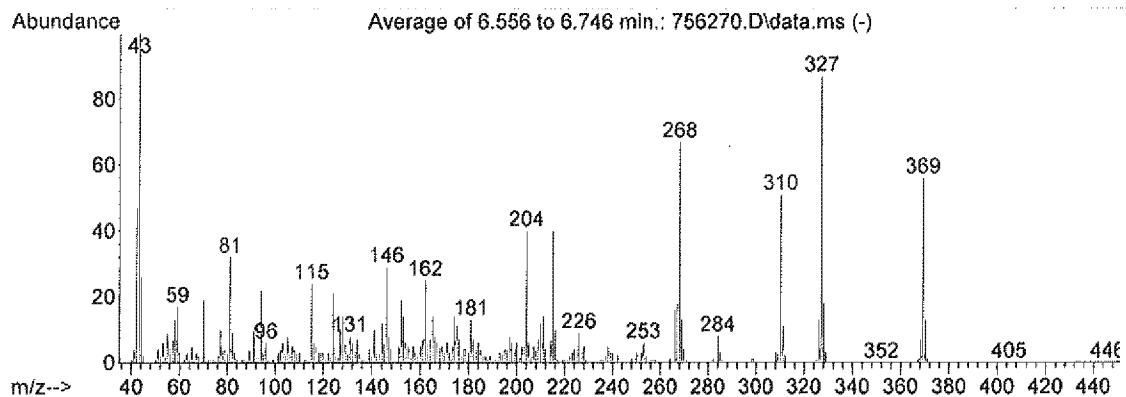
| Ret. Time | Area | Area % | Ratio % |
|-----------|---------|--------|---------|
| 6.603 | 1169785 | 100.00 | 100.00 |

Information from Data File:

File Name : F:\Q4-2010\SYSTEM4\11_19_10\756270.D
Operator : ASD/KAC
Date Acquired : 20 Nov 2010 4:27
Sample Name : HEROIN STD
Submitted by : ASD
Vial Number : 70
AcquisitionMeth: DRUGS
Integrator : RTE

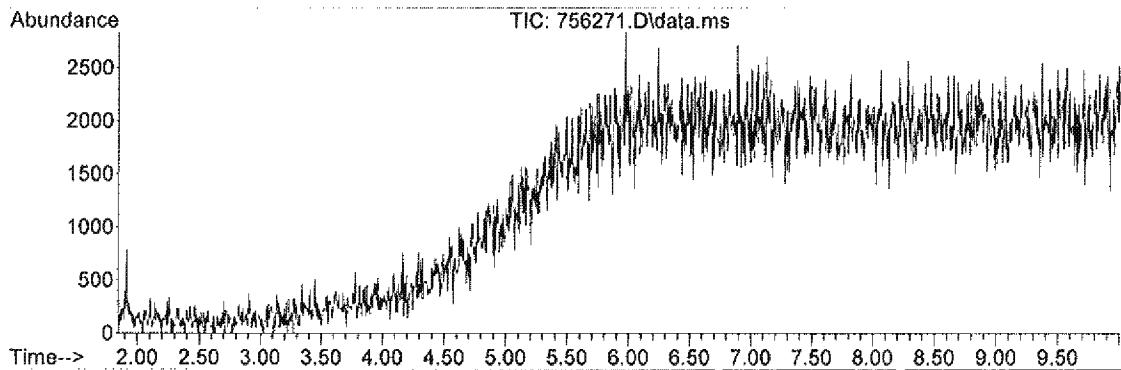
Search Libraries: C:\Database\SLI.L Minimum Quality: 80
C:\Database\NIST05a.L Minimum Quality: 80
C:\Database\PMW_TOX2.L

| PK# | RT | Library/ID | CAS# | Qual |
|-----|------|-----------------------------|-------------|------|
| 1 | 6.60 | C:\Database\SLI.L HEROIN | 000561-27-3 | 99 |



Information from Data File:

File Name : F:\Q4-2010\SYSTEM4\11_19_10\756271.D
Operator : ASD/KAC
Date Acquired : 20 Nov 2010 4:41
Sample Name : BLANK
Submitted by : ASD
Vial Number : 2
AcquisitionMeth: DRUGS
Integrator : RTE



| Ret. Time | Area | Area % | Ratio % |
|-----------|------|--------|---------|
|-----------|------|--------|---------|

NO INTEGRATED PEAKS